

K023302

**510(k) Summary**  
**Echelon Porous Plus HA Hip Stems**

OCT 25 2002

**Submitter's name:** Smith & Nephew, Inc.  
**Submitter's address:** 1450 Brooks Road, Memphis, TN 38116  
**Submitter's telephone number:** 901-399-6487  
**Contact person:** David Henley

**Date summary prepared:** October 22, 2002

**Trade or proprietary device name:** Echelon Porous Plus HA Hip Stems  
**Common or usual name:** Prosthetic Hip Joint – HA Coated Porous Femoral Stem  
**Device Product Code and Panel Code:** MEH / 87 (Orthopedics)  
**Classification name:** 21 CFR 888.3358 hip joint metal/polymer/metal semi-constrained porous-coated uncemented prosthesis-Class II

**Substantially Equivalent Legally Marketed Devices**

Echelon Porous Plus HA Hip Stems are substantially equivalent to Smith & Nephew Synergy HA on Porous Hip Stems (K002996), Howmedica Meridian ST/PA Femoral Stems (K971206) and Osteoimplant Technology, Inc. LSF HA Coated Triad Total Hip System (femoral stems).

**Device Description**

Echelon Porous Plus HA Hip Stems are fully porous coated HA stems. These stems are designed for use with existing modular Smith & Nephew, Inc. femoral heads.

**Device Intended Use**

Total hip components are indicated uncemented use only in individuals undergoing primary and revision surgery where other treatments or devices have failed in rehabilitating hips damaged as a result of trauma, inflammatory joint disease such as rheumatoid arthritis; or non-inflammatory degenerative joint disease (NIDJD) or any of its composite diagnoses such as osteoarthritis; avascular necrosis; traumatic arthritis; slipped capital epiphysis; fused hip; fracture of the pelvis; diastrophic variant; old, remote osteomyelitis with an extended drainage-free period, nonunion, femoral neck fracture and trochanteric fractures of the proximal femur with head involvement that are unmanageable using other techniques; femoral osteotomy, or Girdlestone resection; fracture dislocation of the hip; and correction of deformity.

Echelon Porous Plus HA Hip Stems are designed uncemented use and for single use only.

**Technological and Performance Characteristics:**

Echelon Porous Plus HA Hip Stems are similar to and substantially equivalent to the legally marketed predicate devices listed previously. All of these predicate devices are indicated for total hip replacement, are similar in design, and have the same technological characteristics as Echelon Porous Plus HA Hip Stems. The safety and effectiveness for the subject devices is adequately supported by test data, material information, and substantial equivalence information provided in this Special 510(k) Premarket Notification. Design Verification Test results indicate that the subject devices meet the requirements of the applicable FDA guidance documents.



Food and Drug Administration  
9200 Corporate Boulevard  
Rockville MD 20850

OCT 25 2002

Mr. David Henley  
Senior Clinical/Regulatory Affairs Specialist  
Smith and Nephew, Inc.  
1450 E. Brooks Road  
Memphis, Tennessee 38116

Re: K023302

Trade/Device Name: Echelon Porous Plus HA Hip Stems  
Regulation Number: 21 CFR 888.3353  
Regulation Name: Hip joint metal/ceramic/polymer semi-constrained  
cemented or nonporous uncemented prosthesis  
Regulatory Class: Class II  
Product Code: MEH  
Dated: October 2, 2002  
Received: October 3, 2002

Dear Mr. Henley:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

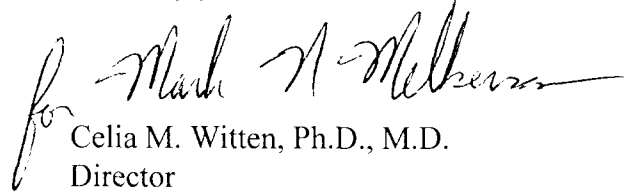
Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

Page 2 - Mr. David Henley

This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801 and additionally 21 CFR Part 809.10 for in vitro diagnostic devices), please contact the Office of Compliance at (301) 594-4659. Additionally, for questions on the promotion and advertising of your device, please contact the Office of Compliance at (301) 594-4639. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). Other general information on your responsibilities under the Act may be obtained from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address <http://www.fda.gov/cdrh/dsma/dsmamain.html>

Sincerely yours,

A handwritten signature in black ink, appearing to read "for Mark A. Milburn", is written over the printed name of Celia M. Witten.

Celia M. Witten, Ph.D., M.D.  
Director  
Division of General, Restorative  
and Neurological Devices  
Office of Device Evaluation  
Center for Devices and  
Radiological Health

Enclosure

**Premarket Notification  
Indications Statement**

510(k) Number (if known): K023302

Device Name: **Echelon Porous Plus HA Hip Stems**


**Indications for Use:**

Total hip components are indicated for uncemented use only in individuals undergoing primary and revision surgery where other treatments or devices have failed in rehabilitating hips damaged as a result of trauma, inflammatory joint disease such as rheumatoid arthritis; or noninflammatory degenerative joint disease (NIDJD) or any of its composite diagnoses such as osteoarthritis; avascular necrosis; traumatic arthritis; slipped capital epiphysis; fused hip; fracture of the pelvis and diastrophic variant; old, remote osteomyelitis with an extended drainage-free period; non-union; femoral neck fracture and trochanteric fractures of the proximal femur with head involvement that are unmanageable using other techniques; femoral osteotomy, or Girdlestone resection; fracture dislocation of the hip; and correction of deformity.

**Echelon Porous Plus HA Hip Stem** components are intended uncemented use and for single use only.

(PLEASE DO NOT WRITE BELOW THIS LINE – CONTINUE ON ANOTHER PAGE IF NEEDED)

Concurrence of CDRH, Office of Device Evaluation (ODE)

  
(Division Sign-Off)  
Division of General, Restorative  
and Neurological Devices

510(k) Number K023302

Prescription Use \_\_\_\_\_  
(Per 21 CFR 801.109)

OR

Over-the-Counter Use \_\_\_\_\_  
(Optional Format 1-2-96)